

## 5 FAH-2 H-700 MANAGING RADIO NETWORKS

### 5 FAH-2 H-710 RADIO COMMUNICATIONS

*(CT:TEL-36; 04-18-2013)*  
*(Office of Origin: IRM/OPS/ITI/LWS/RPB)*

#### 5 FAH-2 H-711 TERMS

*(CT:TEL-36; 04-18-2013)*

- a. Radio **communications** is the use of electromagnetic waves in a radio frequency range to transmit or receive electric signals without wire connecting the transmit and receive points.
- b. A radio repeater receives a radio signal at one frequency and retransmits the signal on another frequency and/or power level. Repeaters and hi-gain antenna systems enhance radio signals.
- c. Typical radio wave frequencies are measured in megahertz, one million cycles per second. The Department uses radios that broadcast in one of three frequency ranges:
  - (1) **High frequency:** A radio frequency between 3 and 30 megahertz;
  - (2) **Very high frequency:** A band of radio frequencies between 30 and 300 megahertz; and
  - (3) **Ultrahigh frequency:** A band of radio frequencies from 300 to 3,000 megahertz.

#### 5 FAH-2 H-712 INTERNATIONAL AGREEMENTS

##### 5 FAH-2 H-712.1 Authorities

*(CT:TEL-36; 04-18-2013)*

This section does not pertain to radio stations operated by or allied with the Broadcasting Board of Governors (BBG). The Department of State coordinates frequency use for U.S. Government foreign affairs agencies with host foreign

**UNCLASSIFIED (U)**

U.S. Department of State Foreign Affairs Manual Volume 5 Handbook 2  
Telecommunications Handbook

governments, except for certain international military channels that have been established for military frequency planning and coordination. International frequency allocation and registration is accomplished through the International Telecommunications Union (ITU) in accordance with current international agreements. The International Frequency Registration Board (IFRB), a permanent organization of the ITU, publishes the International Frequency List (IFL), which is based on the Master International Frequency Register (MIFR).

## **5 FAH-2 H-712.2 Host-Government Permission to Use Frequencies**

(CT:TEL-36; 04-18-2013)

a. Article 27 of the Vienna Convention on Diplomatic Relations states that:

"The receiving state shall permit and protect free communication on the part of the mission for all official purposes. In communicating with the Government and the other missions and consulates of the sending *State*, wherever situated, the mission may employ all appropriate means, including diplomatic couriers and messages in code or cipher. However, the mission may install and use a wireless transmitter only with the consent of the receiving *State*."

The Information Programs Center (IPC) should permanently file diplomatic notes and all other records regarding permission to use frequencies.

b. *Do not confuse host*-government consent to use frequencies with providing the host government detailed information about *a* post's networks. The *information management officer* (IMO) should inform the COM (*chief of mission*) immediately if host-government *officials* request detailed information about *a* post's radio inventory.

## **5 FAH-2 H-712.3 Interoperability of Radio Networks**

(CT:TEL-36; 04-18-2013)

The COM has the authority to disclose radio frequencies used by the mission to "friendly" third-country missions, international organizations, or U.S. businesses. The purpose of exchanging frequencies is to facilitate the broadcast of information in emergency situations. The COM determines which missions or organizations are considered friendly. If a post intends to share frequencies with third countries, *it must* follow these guidelines:

- (1) The COM must approve the disclosure of mission frequencies to third countries;
- (2) The *regional security officer* (RSO) must participate in any third-country frequency-sharing plans;
- (3) The Department will accept no financial responsibility to provide radio equipment or resources to implement interoperability. The post must pay for any units it chooses to exchange with third-country missions;

**UNCLASSIFIED (U)**

U.S. Department of State Foreign Affairs Manual Volume 5 Handbook 2  
Telecommunications Handbook

- (4) Procedures should be established to test the frequency and interoperability of exchanged equipment; *and*
- (5) The designated third-country party may only use a mission frequency or radio in scheduled tests or in an emergency.

## **5 FAH-2 H-713 PURPOSE OF RADIO NETWORKS**

### **5 FAH-2 H-713.1 Security Enhancement**

*(CT:TEL-36; 04-18-2013)*

The primary purpose of radio networks is to enhance the security and protection of U.S. Government personnel and property at posts abroad. The Department establishes radio networks where host-government telecommunications infrastructures are inadequate or unreliable. Radios are used when host - government systems fail, when patrolling travel routes of official visitors to post, and in emergencies.

### **5 FAH-2 H-713.2 Emergency Communication**

*(CT:TEL-36; 04-18-2013)*

Radio contact is ideal for rapidly disseminating information during emergency situations. Radio broadcasts provide paging and immediate, simultaneous communication to multiple network participants.

### **5 FAH-2 H-713.3 Emergency Action Committee (EAC) Networks**

*(CT:TEL-36; 04-18-2013)*

The *emergency action plan* (EAP) is the primary document that provides procedures and guidance to prepare post personnel for their roles and activities in crisis situations. The *emergency action committee* radio network supports the EAP. EAC networks, whether VHF or UHF, are used to broadcast official instructions to EAC members, Marine *security guards*, and other designated personnel during an emergency, evacuation, or potentially dangerous situation. EAC networks are specially configured with signal-enhancing equipment to ensure reliable radio contact among participating network subscribers. The radios used on this network are capable of encrypted transmission. The EAP should contain the most recent radio network configuration information and revisions.

## 5 FAH-2 H-713.4 Emergency and Evacuation (E&E) Networks

(CT:TEL-36; 04-18-2013)

A *post's* E&E network is used to broadcast information and guidance during emergency, evacuation, or potentially dangerous situations. These radios are assigned to all or most of the U.S. Department of State employees in the mission. The radios used on this network **do not** have encrypted operations. They can contact EAC radios in the clear mode. U.S. employees of other agencies at post may also be members of this network using radios procured by their agency.

## 5 FAH-2 H-714 SECURITY RESTRICTIONS

(CT:TEL-36; 04-18-2013)

Any radio equipment to be used in a controlled access area must comply with Department Unclassified Electrical/Electronic Equipment Security Standards. Radio equipment installed, stored, and used exclusively in the *information programs center* (IPC) must be handled in accordance with applicable DS security standards and guidelines.

## 5 FAH-2 H-715 ON-AIR PROTOCOLS

(CT:TEL-36; 04-18-2013)

General on-air protocols for operating radio equipment are derived from Allied Communications Publication 125F (ACP-125 F) guidelines. The RSO and IMO should enforce the following protocols to maintain the security of the network and to keep EAC channels clear for urgent or emergency communications:

- (1) Keep communiqués brief and clearly state your intention or information you wish to convey;
- (2) Use call signs and mutually recognizable code words when identifying network participants, mission personnel, or locations;
- (3) Use the EAC channel only for substantive communication. Communications for administrative purposes should be restricted to secondary channels and never allowed to infringe on any channel assigned for *emergency action plan* (EAP) purposes;
- (4) End each transmission by saying "over." End radio contact by saying "out"; *and*
- (5) Use the International Phonetic Alphabet (see 5 FAH-2 Exhibit H-715) to spell words or acronyms that may not transmit clearly.

**UNCLASSIFIED (U)**

U.S. Department of State Foreign Affairs Manual Volume 5 Handbook 2  
Telecommunications Handbook

## **5 FAH-2 H-716 THROUGH H-719 UNASSIGNED**

**UNCLASSIFIED (U)**

**UNCLASSIFIED (U)**

U.S. Department of State Foreign Affairs Manual Volume 5 Handbook 2  
Telecommunications Handbook

## **5 FAH-2 Exhibit H-715 INTERNATIONAL PHONETIC ALPHABET**

*(CT:TEL-36; 04-18-2013)*

A—ALPHA  
B—BRAVO  
C—CHARLIE  
D—DELTA  
E—ECHO  
F—FOXTROT  
G—GOLF  
H—HOTEL  
I—INDIA  
J—JULIETT  
K—KILO  
L—LIMA  
M—MIKE  
N—NOVEMBER  
O—OSCAR  
P—PAPA  
Q—QUEBEC  
R—ROMEO  
S—SIERRA  
T—TANGO  
U—UNIFORM  
V—VICTOR  
W—WHISKEY  
X—XRAY  
Y—YANKEE  
Z—ZULU

**UNCLASSIFIED (U)**